

**Notice of Allowability**

Application No.

09/808,612

Applicant(s)

PENNELLO ET AL.

Examiner

Fred Ferris

Art Unit

2128

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 26 May 2006.
2. ☒ The allowed claim(s) is/are 33,34 and 36-61.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Fred Ferris*  
*PRIMARY EXAMINER*  
*TC 2100*

### DETAILED ACTION

1. *This Office Action is responsive to applicant's amendment filed 26 May 2006. Applicants have now cancelled claims 1-32 and 35. Claims 33-34 were previously allowed. New claims 36-61 have now been allowed over the prior art of record.*

### Response to Arguments

2. *Applicant's arguments filed 26 May 2006 have been fully considered and found to be persuasive. Previous rejections/objections are withdrawn in view of applicants' amended/new claims and arguments submitted 26 May 2006.*

### EXAMINER'S AMENDMENT

3. *An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.*

*The application has been amended as follows:*

*In the last line of claim **delete** the word "process(es)" and insert the word "**processes**" after the word "said". The last line of claim 33 should now read: "said **processes** executing in a simulator will run as quickly as possible."*

*In the last line of claim 47 the word replace the word "perfromed" with the word "**performed**". The last line of claim 47 should now read: "method comprises is **performed** by a computer program..."*

***Allowable Subject Matter***

4. *Claims 33-34, and 36-61 are allowed over the prior art of record.*

*The following is an examiner's statement of reasons for allowance:*

*Applicants are disclosing a method and apparatus for debugging distributed programs by identifying and initializing processes, executing a thread to control processes, and cycling between processes to monitor status. This has been disclosed in the prior art of record and is commonly known as debugging of concurrent processes.*

*While these elements are individually disclosed in the prior art, the prior art of record does not meet the conditions as suggested in MPEP section 2132, namely:*

*"The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an **ipsissimis verbis** test, i.e., identity of terminology is not required. **In re Bond**, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."*

*In this case, the prior art does not explicitly disclose the specific sequence of steps and combination of apparatus elements relating to advancing thru instruction cycle based on simulation type, hardware type, and status checking, where processes gather status information of heterogeneous processors based on a dynamic per-process time interval as now required by independent claims 33, 46, 49, and 61. (See: specification page 9, line 25 to page 14, line 7, Figs. 2, 3 for definition of simulation type, hardware type, and dynamic per-process time interval.)*

*The closest prior art uncovered during examination teaches certain limitations of the claimed invention as follows:*

*U.S. Patent 6,282,701 issued to Wygodny: discloses debugging distributed programs over multiple processors, initializing processors, executing a control thread, switching between processes and obtaining status information but does not explicitly disclose specific sequence of steps and combination of apparatus elements relating to advancing thru instruction cycle based on simulation type, hardware type, and status checking, where processes gather status information of heterogeneous processors based on a dynamic per-process time interval as now required by independent claims 33, 46, 49, and 61.*

*U.S. Patent 6,117,181 issued to Dearth: also discloses debugging distributed programs over multiple processors, initializing processors, executing a control thread, switching between processes and obtaining status information but again does not explicitly disclose specific sequence of steps and combination of apparatus elements relating to advancing thru instruction cycle based on simulation type, hardware type, and status checking, where processes gather status information of heterogeneous processors based on a dynamic per-process time interval as now required by independent claims 33, 46, 49, and 61.*

*The features noted above relating to, specific sequence of steps and combination of apparatus elements relating to advancing thru instruction cycle based on simulation type, hardware type, and status checking, where processes gather status information of heterogeneous processors based on a dynamic per-process time interval renders the*

Art Unit: 2128

*claimed invention non-obvious over the prior art of record. Dependent claims 34, 36-45, 47-48, and 61-60 are deemed allowable as depending from independent claims 33, 46, and 49 respectively.*

*Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."*

### **Conclusion**

5. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-3780. The Official Fax Number is: (571) 272 8300.*

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August 1, 2006



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